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2055 GATEWAY PLACE
SUITE 550
SAN JOSE, CA 95110-1089

EXAMINER

DIVECHA, KAMAL B

ART UNIT PAPER NUMBER

2151

DATE MAILED: 09/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/945,160

Applicant(s)

VIAVANT ET AL.

Examiner

KAMAL B. DIVECHA

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3, 5-19, 21-42, 44, 46-60, 62-83 and 85 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 5-19, 21-42, 44, 46-60, 62-83, 85 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

Claims 1, 3, 5-19, 21-42, 44, 46-60, 62-83, 85 are pending in this application.

Claims 2, 4, 20, 43, 45, 61, 84 are cancelled in response filed on June 5, 2006.

Applicant's arguments filed on June 5, 2006 in an Request for Continued Examination (RCE), with respect to claims 1, 3, 5-19, 21-42, 44, 46-60, 62-83, 85 have been considered but are moot in view of the new ground(s) of rejection.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 3, 5-10, 13, 16-17, 21-22, 24-27, 29-42, 44, 46-51, 54, 57-58, 62-63, 65-68, 70-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elnozahy et al., (hereinafter Elnozahy, U. S. Patent No. 6,792,459 B2) in view of Mortensen et al. (hereinafter Mortensen, U. S. Patent No. 5,481,735).

As per claim 1, Elnozahy discloses a method for measuring client-side performance, the method comprising:

intercepting an item generated by an application program executing on a server device that is to be sent over a network to a client process executing on a client device, wherein the intercepting is performed prior to arrival of the item at the client process (col. 5 L54-67 and fig. 1);

modifying the item transparently with respect to the application program to produce a modified item that includes code which, when processed by one or more processors at the client device causes: at the client device, measuring performance related to a service associated with the item, and at the client device (col. 4 L60 to col. 5 L8, col. 5 L17-25), performing one or more acts based on a measurement resulting from said step of measuring performance, wherein the one or more acts includes sending data indicating the measurement to an entity over the network (col. 6 L10-19); and

sending the modified item over the network to the client process executing on the client device (col. 6 L10-12).

However, Elnozahy does not disclose the process of determining a percentage of total items sent to the client process that are to be modified; determining, based upon the percentage of total items sent to the client process that are to be modified, whether the intercepted item is to be modified; and if based upon the percentage of total items sent to the client process that are to be modified, the intercepted item is to be modified.

Mortensen, from the same field of endeavor, explicitly discloses the process of determining a percentage of total items that are to be modified and based upon the determination, modifying the intercepted item (col. 9 L4-40, fig. 7, col. 5 L53 to col. 8 L25, col. 10 L43-64, col. 20 L8-30, fig 8B).

Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Elnozahy, in view of Mortensen in order to determine when to modify the intercepted item based upon the statistics or the percentage of items.

One of ordinary skilled in the art would have been motivated because it would have allowed and indicated when and which items are to be intercepted and modified (Mortensen, col. 9 L4-12).

As per claim 3, Elnozahy discloses the process wherein the steps of measuring performance and performing one or more acts based on the measurement are performed transparently with respect to a user of the client process (col. 5L54 to col. 6 L20 and col. 2 L25-54).

As per claim 5, Elnozahy discloses the process wherein said step of sending the data to an entity comprises storing the data in a data structure that is automatically sent to a server device associated with said service in response to a later request from the client process for said service (fig. 1, col. 2 L61 to col. 3 L7, col. 8 L57-67).

As per claim 6, Elnozahy discloses the process wherein the client is a web browser and the data structure is a cookie stored on the client device by the web browser (fig. 1, col. 8 L58-65).

As per claim 7, Elnozahy discloses the process wherein the step of modifying the item includes adding code to the item which, when processed by one or more processors at the client device, causes the client device to issue a request to the server device over the network (col. 5 L17-62), and said step of sending data indicating the measurement to an entity further comprises sending the request including the data indicating the measurement to the server device over the network (col. 6 L10-55 and fig. 3).

As per claim 8, Elnozahy discloses the process wherein the request is for a particular file and in response to the request for the particular file no change is made by the client process to a page already rendered on a display of the client device (col. 7 L1-46).

As per claim 9, Elnozahy discloses the process of storing the data indicating the measurement in a log file on the server device (fig. 1 item #195, 190).

As per claim 10, Elnozahy discloses the process of storing the data indicating the measurement in a database of the entity on the network (fig. 1 item #195, 190).

As per claim 13, Elnozahy discloses the process wherein the step of at the client device performing one or more acts based on the measurement comprises determining whether the measurement indicates performance has fallen below a threshold and if the measurement indicates performance has fallen below the threshold, then sending a notification message (col. 9 L44-54, col. 2 L61 to col. 3 L7).

As per claim 16, Elnozahy discloses the process wherein the measurement is a client response time between a first time when a user of the client process selects an item on a first web page rendered on a display of the client device and a second time when a second web page is fully rendered on the display of the client device (fig. 5, col. 7 L1-46).

As per claim 17, Elnozahy discloses the process wherein processing of the code by the one or more processors at the client device causes collecting ancillary information relating to one or more components of the client process that participate in obtaining the service from the application program and the at the client device performing one or more acts based on the measurement includes correlating the measurement with the ancillary information (fig. 1 item #195, fig. 3 item #260, item #250, fig. 5 item #565 and fig. 6 item #670).

As per claim 21, Elnozahy discloses the process wherein the item to be sent to the client process is stored in a cache before the item is sent to the client process (fig. 1 item #115, 131-133); said step of intercepting the item comprises accessing the item in the cache and said step of sending the modified item to the client process comprises replacing the item in cache with the modified item (fig. 1 and col. 6 L1-10).

As per claim 22, Elnozahy discloses the process wherein the cache is on the server device (fig. 1 item #110, 115 and col. 6 L1-10).

As per claim 24, Elnozahy discloses the process wherein the item includes hypertext markup language (HTML) statements; and the client process is a web browser (col. 2 L25-36, fig. 1 item #160, col. 4 L20-32).

As per claim 25, Elnozahy discloses the process wherein the web browser is configured to run javascript and the code comprises javascript statements (col. 4 L20-59).

As per claim 26, Elnozahy discloses the process wherein the code conforms to a scripting language (col. 2 L25-54, col. 4 L20-45).

As per claim 27, Elnozahy discloses the process wherein the code comprises a Java applet (col. 2 L25-36).

As per claim 29, Elnozahy discloses the process wherein the step of modifying the item comprises appending the code to the end of the item (col. 2 L25-54 and col. 4 L10-67).

As per claim 30, Elnozahy discloses the process wherein the item includes markup language statements and said step of modifying the item further comprises inserting the code at a particular statement of the markup language statements (col. 5 L41-67, col. 4 L19-45).

As per claim 31, Elnozahy discloses the process wherein the code includes at least one of first code added to a first item and second code added to a second item; and said measuring performance comprises starting a time measurement based on the first code and ending a time measurement based on the second code (fig. 3 and col. 7 L1-46).

As per claim 32, Elnozahy discloses the process wherein the first code is executed in response to a user of the client process clicking on a control included in the first item (col. 7 L1-11) and the second code is executed in response to fully loading the second item (fig. 3, col. 7 L1-46).

As per claim 33, Elnozahy discloses the process wherein the code includes first code executed upon arrival of the first code at the client process and second code executed in response to a data structure generated by the client process after arrival of the first code (fig. 3 and col. 7 L1-46).

As per claim 34, Elnozahy discloses the process wherein the data structure describes an event at the client device (col. 7 L1-46).

As per claim 35, Elnozahy discloses the process wherein the event is message received from an operating system executing on the client device (col. 7 L1-46).

As per claim 36, Elnozahy discloses the process wherein the event is a manipulation of a control of the client device by a user (col. 7 L1-46).

As per claim 37, Elnozahy discloses the process wherein processing of the second code causes the measuring performance (col. 7 L1-46, col. 9 L1-54).

As per claim 38, Elnozahy discloses the process wherein processing of the second code causes recording a current time (col. 9 L1-20, col. 7 L1-46).

As per claim 39, Elnozahy discloses the process wherein the item to be sent to the client process includes a third code to be executed in response to the data structure generated by the client process and processing the first code causes replacing the third code with the second code (col. 7 L1 to col. 8 L27 and col. 9 L1-67).

As per claim 40, Elnozahy discloses the process wherein the code includes first code executed in response to data structure describing a first event generated by the client process and second code executed in response to a data structure describing a second event generated by the client process (col. 7 L1-46 and col. 9 L1-67 and fig. 3).

As per claim 41, Elnozahy discloses the process wherein the item to be sent to the client process includes a third code to be executed in response to the data structure describing the second event generated by the client process and processing the first code causes replacing the third code with the second code (col. 7 L1 to col. 8 L27 and col. 9 L1-67).

As per claims 42, 44, 46-51, 54, 57-58, 62-63, 65-68, 70-82, they do not teach or further define over the limitations in claims 1, 3, 5-10, 13, 16-17, 21-22, 24-27, 29-41. Therefore claims 42, 44, 46-51, 54, 57-58, 62-63, 65-68, 70-82, are rejected for the same reasons as set forth in claims 1, 3, 5-10, 13, 16-17, 21-22, 24-27, 29-41.

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2. Claims 11-12, 14-15, 52-53, 55-56, 83 and 85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elnozahy et al., (hereinafter Elnozahy, U. S. Patent No. 6,792,459 B2), in view of Mortensen et al. (hereinafter Mortensen, U. S. Patent No. 5,481,735), and further in view of Burgess et al., (hereinafter Burgess, U. S. Patent No. 5,696,701).

As per claim 83, Elnozahy discloses a method for responding to client-side performance on a network connecting a client device executing a client process to a server device configured to execute an application program to provide a service (fig. 1), the method comprising the steps of:

intercepting an item produced by an application program (col. 5 L54-67 and fig. 1);

modifying the item transparently with respect to the application program to produce a modified item that includes code which, when processed by one or more processors at the client device causes: at the client device, measuring performance related to a service associated with the item (col. 4 L60 to col. 5 L8, col. 5 L17-25), and based on measurement resulting from said step of measuring performance, sending data indicating the measurement from the client device over the network to the server device (col. 6 L10-19 and fig. 1);

sending the modified item over the network to the client process executing on the client device (col. 6 L10-12).

receiving the data over the network indicating the measurement (fig. 1 and col. 8 L15-25, col. 6 L11-19);

storing the data indicating the measurement in a database (fig. 1).

However, Elnozahy does not disclose the process of determining a percentage of total items sent to the client process that are to be modified; determining, based upon the percentage

of total items sent to the client process that are to be modified, whether the intercepted item is to be modified; and if based upon the percentage of total items sent to the client process that are to be modified, the intercepted item is to be modified and the process wherein based on the data indicating the measurement, determining whether the data indicates performance has fallen below a threshold, and if the data indicates performance has fallen below the threshold, then sending a notification message.

Mortensen, from the same field of endeavor, explicitly discloses the process of determining a percentage of total items that are to be modified and based upon the determination, modifying the intercepted item (col. 9 L4-40, fig. 7, col. 5 L53 to col. 8 L25, col. 10 L43-64, col. 20 L8-30, fig 8B).

Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Elnozahy, in view of Mortensen in order to determine when to modify the intercepted item based upon the statistics or the percentage of items.

One of ordinary skilled in the art would have been motivated because it would have allowed and indicated when and which items are to be intercepted and modified (Mortensen, col. 9 L4-12).

However Elnozahy in view of Mortensen does not disclose the process wherein based on the data indicating the measurement, determining whether the data indicates performance has fallen below a threshold, and if the data indicates performance has fallen below the threshold, then sending a notification message.

Burgess, from the same field of endeavor, explicitly discloses the process conducted at the server device, the process comprising receiving the data over the network indicating the

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measurement (col. 4 L40-42, col. 2 L33-37), storing the data indicating the measurement in a database (fig. 8 item #140, col. 56-60, col. 3 L62-67 and col. 4 L40-46) and based on the data indicating the measurement, determining whether the data indicates performance has fallen below a threshold and if the data indicates performance has fallen below the threshold, then sending a notification message to an administrator and a user (col. 6 L40-49, col. 6 L64 to col. 7 L5, col. 4 L13-15, col. 2 L38-45, col. 7 L4-12 and fig. 2 item #40).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Elnozahy in view of Mortensen and further in view of Burgess, in order to determine whether the data indicates performance has fallen below a threshold based on the data indicating the measurement, and if the data indicates performance has fallen below the threshold, then sending a notification message.

One of ordinary skilled in the art would have been motivated because it would have determined the alertable events or performance and notify the appropriate parties regarding the alertable level of the client computer (Burgess, col. 4 L4-15, col. 7 L1-3). It would have also allowed an administrator to take action before the halt of the operating system of the client computer (Burgess, col. 8 L3-11).

As per claims 11-12, 14-15, 52-53, 55-56 and 85 they do not teach or further define over the limitations in claims 83. Therefore claims 11-12, 14-15, 52-53, 55-56 and 85 are rejected for the same reasons as set forth in claims 83.

3. Claims 18-19, 23, 28, 59-60, 64 and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elnozahy et al., (hereinafter Elnozahy, U. S. Patent No. 6,792,459 B2) in view of Mortensen et al. (hereinafter Mortensen, U. S. Patent No. 5,481,735), and further in view of Guthrie (U. S. Patent No. 6,266,681 B1).

As per claim 18, Elnozahy in view of Mortensen does not disclose the process of determining the type associated with the item and determining whether to perform said step of modifying the item based on the type of the item, after intercepting the item and before modifying the item.

Guthrie discloses the process of intercepting the item and determining the type associated with the item and determining whether to perform modification of the item based on the type of item (col. 6 L25-40, col. 10 L52 to col. 11 L6).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teaching of Guthrie as stated above with Elnozahy and Mortensen, in order to make a determination whether to perform the process of modifying the item based on the type associated with the item.

One of ordinary skilled in the art would have been motivated because it would have determined what type of code the clients browser would support and what code to inject into the item or the document (Guthrie, col. 11 L1-6).

As per claim 19, Elnozahy in view of Mortensen does not disclose the process of determining a unique reference associated with the item and determining whether to perform said step of modifying the item based on whether the unique reference matches a particular reference, after intercepting the item and before modifying the item.

Guthrie discloses the process of determining the unique reference associated with the item and determining whether to perform the step of modifying the item based on whether the unique reference matches a particular reference (col. 6 L25-40, col. 10 L52 to col. 11 L6).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teaching of Guthrie as stated above with Elnozahy and Mortensen, in order to make a determination of modifying the item based on a unique reference.

One of ordinary skilled in the art would have been motivated because of the same reasons as set forth in claim 18.

As per claim 23, Elnozahy in view of Mortensen does not disclose the process wherein the cache is on a proxy server for the client process.

Guthrie explicitly discloses a system wherein the intercepting and the modifying process is conducted at the proxy server (fig. 2 item #204, col. 5 L13-34, col. 10 L52-67: please note that proxy server includes a cache memory).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teaching of Guthrie as stated above with Elnozahy, in order to include a proxy server with a cache memory.

One of ordinary skilled in the art would have been motivated because proxy servers decreases the response times of the client requests by retrieving the requested web pages from the proxy server. It would have also provided additional security in a global network environment (Guthrie, col. 2 L22-63).

As per claim 28, Elnozahy in view of Mortensen does not disclose the process wherein the code comprises an ActiveX module.

Guthrie, explicitly discloses the process of intercepting the HTML documents and modifying the html documents to include a code, wherein the code includes ActiveX component (col. 11 L1-49).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teaching of Guthrie with Elnozahy in order to include ActiveX modules.

One of ordinary skilled in the art would have been motivated so that the code can be inserted in a form of ActiveX component into the HTML document (Guthrie, col. 11 L1-32, col. 6 L41-67).

As per claims 59-60, 64 and 69, they do not teach or further define over the limitations in claim 18-19, 23 and 28. Therefore claims 59-60, 64 and 69 are rejected for the same reasons as set forth in claims 18-19, 64 and 69.

Additional References

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


- a. Choe, U. S. Patent No. 6,584,504 B1: Method and Apparatus for Monitoring Internet Traffic on an Internet Web page.
- b. Rosborough, U. S. Patent No. 5,764,912: Method and Apparatus for Determining Response time in Computer Applications.
- c. Yee et al., U. S. Patent No. 5,872,976: Client-based system for monitoring the Performance of Application programs.
- d. Abbott et al., U. S. Patent No. 6,314,463 B1: Method and System for Measuring Queue Length and Delay.
- e. Elnozahy et al., Pub. No.: US 2002/0112049 A1: Measuring Response Time for a Computer accessing Information from a network.

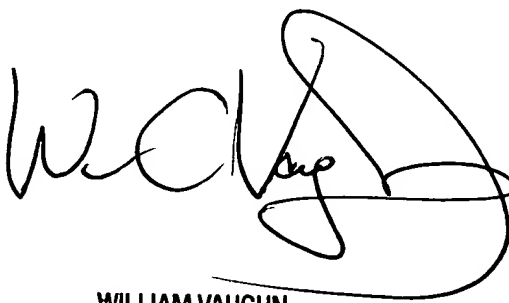
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAMAL B. DIVECHA whose telephone number is 571-272-5863. The examiner can normally be reached on Increased Flex Work Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Kamal Divecha
Art Unit 2151
August 29, 2006.


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